Respiratory Emergencies

2 Hr

Overview

- Signs & Symptoms of inadequate breathing
- Emergency Medical Care of inadequate breathing
- Relationship to airway management
- Medications
- Infant & child considerations

Inadequate Breathing (S & S)

- Shortness of breath
- Restlessness
- Increased pulse rate
- Increased breathing rate
- Decreased breathing rate
- Audible wheezing
- Noisy breathing
- crowing
- Gurgling
- Snoring
- Skin color changes
  - Cyanotic
  - Pale
  - Flushed

Inadequate Breathing (S & S)

- Stridor
  - A harsh sound heard during breathing
  - Upper airway obstruction
- Inability to speak due to breathing efforts
- Retractions - use of accessory muscles
- Shallow & slow breathing may lead to altered mental status

Inadequate Breathing (S & S)

- Abdominal breathing
- Coughing
- Irregular breathing rhythm
- Patient position
  - Tripod position
  - Sitting with feet dangling, leaning forward
- Unusual anatomy

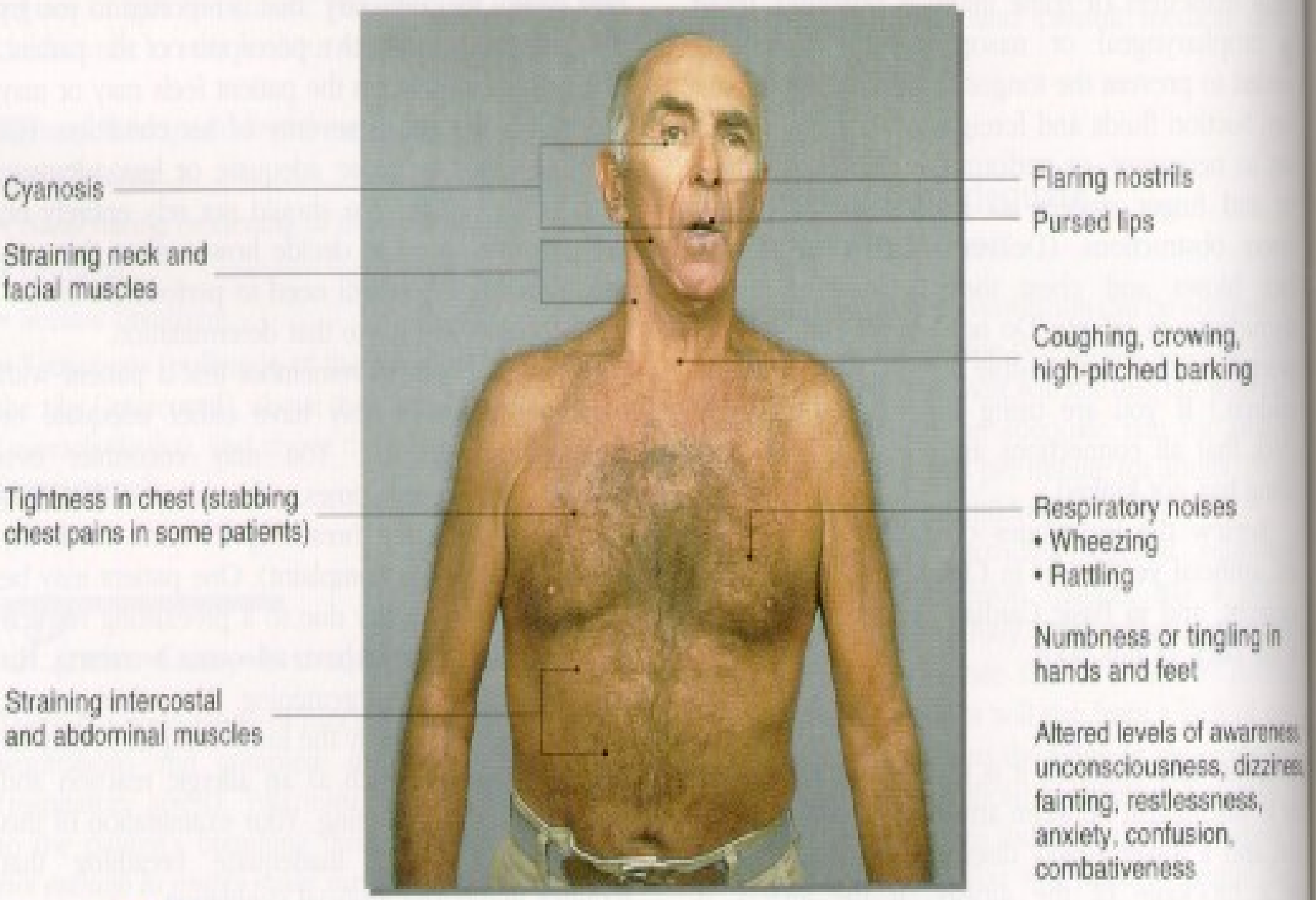

Cyanosis
Straining neck and facial muscles
Tightness in chest (stabbing chest pains in some patients)
Straining intercostal and abdominal muscles
Flaring nostrils
Pursed lips
Coughing, crowing, high-pitched barking
Respiratory noises
• Wheezing
• Rattling
Numbness or tingling in hands and feet
Altered levels of awareness, unconsciousness, dizziness, fainting, restlessness, anxiety, confusion, combativeness

Figure 17–2 Signs and symptoms of breathing difficulty.

Emergency Medical Care
Focused Hx & Physical Exam

- Important questions to ask:
  - Onset
  - Provocation
  - Quality
  - Radiation
  - Severity
  - Time
  - Interventions

Emergency Medical Care
Focused Hx & Physical Exam

- Patient complains of trouble breathing
  - Apply oxygen
  - Assess baseline vital signs
- Patient has a prescribed inhaler
  - Consult medical direction
  - Facilitate administration of inhaler

Emergency Medical Care
Focused Hx & Physical Exam

- Repeat as indicated
- Continue focused assessment
- If patient does not have a prescribed inhaler continue with focused assessment

Relationship to Airway Management

- EMT-B should be prepared to intervene with appropriate oxygen administration and artificial ventilation support

Medications

- Prescribed inhaler
- Medication name
  - Generic
  - Trade

Medication

- Indications
  - Exhibits signs & symptoms
  - Has physician-prescribed inhaler
  - Specific authorization by medical direction

Medication

- Contraindications
  - Patient is unable to use device
  - Inhaler is not prescribed for the patient
  - Permission not granted from medical direction
  - Patient taken max dose prior to EMT arrival

Medication

- Medication form - hand held metered dose inhaler
- Dosage

Medication

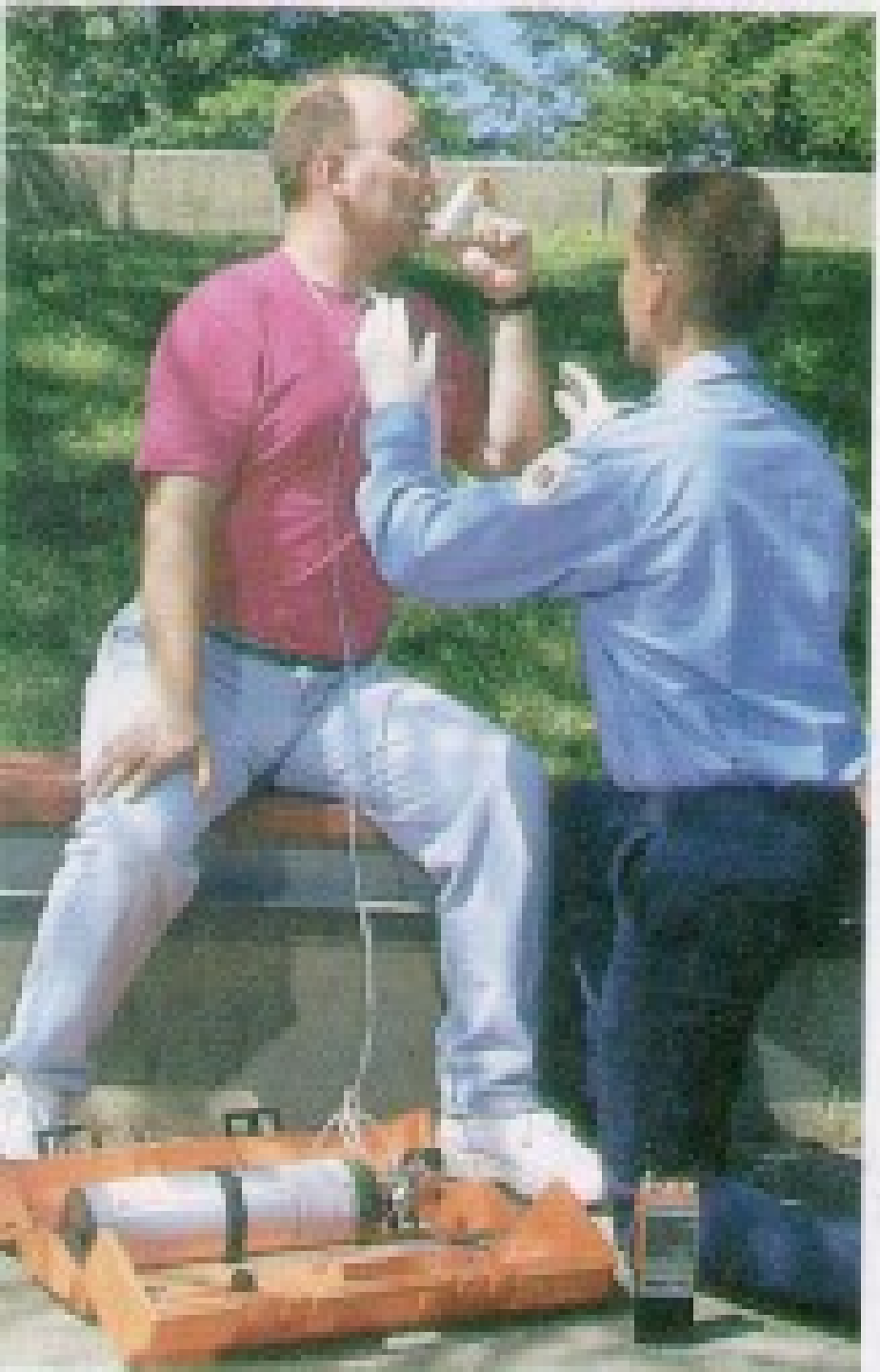
- Administration:
  - Obtain order from medical direction
  - The 5 Rights (medication, patient, route, dose, & time) and assure patient is alert enough to use inhaler
  - Check expiration date
  - Check to see if patient has already taken any doses

Medication

- Administration:
  - Assure the inhaler is at room temperature or warmer
  - Shake the inhaler
  - Remove oxygen from patient
  - Have patient exhale deeply
  - Have patient put lips around the opening of the inhaler

Medication

- Administration:
  - Have patient depress the hand-held inhaler as he/she begins to inhale deeply
  - Instruct patient to hold his/her breath for as long as he/she comfortably can
  - Replace oxygen on patient



Medication

- Allow patient to breathe a few times & repeat second dose per medical direction
- If patient has a spacer device for use with the inhaler, it should be used. Spacer device allows for more effective use of medication.
- **Actions-Beta** - agonist bronchodilators dilate bronchioles reducing airway resistance

Medication

- Side effects
  - Increased pulse rate
  - Tremors
  - Nervousness
- Reassessment Strategies
  - Gather vital signs & perform focused Hx
  - Patient may deteriorate & need positive pressure artificial ventilation

Infant & Child Considerations

- Hand-held inhalers is very common in children
- Retractions - commonly seen in children than adults
- cyanosis is a late finding in children
- Coughing rather than wheezing may be present in some children
- Emergency care usage of inhaler is the same if the indications for usage are met

Summary

- Signs & Symptoms of inadequate breathing
- Emergency Medical Care of inadequate breathing
- Relationship to airway management
- Medications
- Infant & child considerations